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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/098,630

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Gunter Reichert

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10/06/2004

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EXAMINER

WIMER, MICHAEL C

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/098,630

Applicant(s)

REICHERT, GUNTER

Examiner

Michael C. Wimer

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2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,5,7,27-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,5,7,27-36 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over James et al. (5682168).

Regarding Claim 3, James et al. show in Fig. 1, a plurality of antennas mounted on a car and all operating on different frequencies and used for different functions. Some antennas are arranged in structural cut-outs (e.g., antenna 40 mounted in the a structural cut-out, window 38, in the vehicle skin). Figures 2 and 3 shows the basic invention disclosed by James et al. with an antenna 70 arranged in a cut-out defined as 92, comprising a joint (i.e., the left front roof support) at which individual components of the vehicle outer skin adjoin one another. There is no specific suggestion that the embodiment of Fig. 2 is to be used in an antenna arrangement such as that shown in Fig. 1. However, a skilled artisan would have found it obvious to employ the antenna of Fig. 2 in a multi-band arrangement, such as shown in Fig. 1.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over James et al as applied to Claims 3 above, and further in view of Dorrie et al (5177494).

Regarding Claims 7, no slot antenna is suggested by James et al. Thus, Dorrie et al are cited as evidence of obviousness and as resolving the level of ordinary skill in the antenna art and shows a slot antenna arrangement 12,13,13a and 14, where the slot antenna 12 may be directly formed within the door, as suggested at col. 2, lines 15-16. It would have been obvious to the skilled artisan to employ the slot antenna system of Dorrie et al. in the James et al. system, particularly since James et al. clearly suggest many antennas are used on a vehicle since so many frequency bands and functions therefor are available for use.

4. Claims 5 and 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorrie et al (5177494) in view of James et al. (5682168).

Regarding Claims 5 and 27-36, Dorrie et al. show a plurality of antennas 12,13,14 and 13a, where one, 13a, is arranged in a structural cut-out (i.e., the windshield or window) and another 12, is formed by a slot in the vehicle skin (see Fig. 2 and col. 2, lines 15-16, where the slot is formed in the "paneling element" or door), and the slot is dimensioned to operate at a particular frequency (col. 1, lines 46-48). However, all of the slot antennas disclosed are said to be connected to a common feed point of the feeder/radio for diversity/omnidirectional coverage. Thus, James et al are cited as evidence of obviousness and as resolving the level of ordinary skill in the antenna art, and show in Prior Art Fig. 1, a plurality of antennas (including use in AM, FM, GPS, radar distance measuring, mobile phone, satellite radio, etc.) disposed in various locations on a car, and illustrative of a method for making such car. It would have been obvious to the skilled

artisan to employ such an arrangement of antennas in the car of Dorrie et al for providing a diverse communication system.

5. Claims 3,33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (2520986).

Regarding Claims 3 and 33, Williams et al show a plurality of antennas 21 and 22 (Fig. 2) formed in structural gaps in the vehicle outer skin, between the roof and body panels (the antennas are along the pillars which are in a gap between body panels), the gaps define a joint where the body panels adjoin one another, all arranged as claimed. The use of a respective antenna on different frequency bands is an obvious choice by those skilled in the antenna art, particularly since they are employed in the AM Broadcast band, which also includes other service bands (e.g., such as highway traffic reporting). The loops are insulated from the body parts via dielectric paneling members that cover the loops.

Response to Arguments

6. Applicant's arguments with respect to claims of record have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun O. Harvey can be reached on (571) 272-1835. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Wimer
Primary Examiner
Art Unit 2828

MCW
9/28/2004